



Enhanced Transit Service

Description

Enhanced transit service consists of service improvements ranging from new rail lines to reduced bus fares. Such projects are implemented by local transit agencies. Many transit enhancements do not result in reduced single occupant vehicle trips because many trips are converted from existing rideshare and transit service users.

Enhanced transit service has been implemented as a congestion-relieving and air quality improvement measure in a number of cities including St. Louis. Enhanced transit service projects can be funded through a number of existing federal and state programs, including the federal Congestion Mitigation Air Quality (CMAQ) funding program.

Emissions Reductions*

Enhanced transit service can reduce volatile organic compound (VOC), nitrogen oxide (NO_x) and carbon monoxide (CO) emissions. Enhanced transit service programs can reduce mobile source VOC emissions by an estimated 0.9%.

Estimated Cost*

The average cost per daily round trip avoided through enhanced transit service initiatives is approximately \$10.00. The cost per ton of mobile source VOC emissions reduced is estimated to be \$353,000.

Other Benefits and Considerations

In addition to emissions reductions, enhanced transit programs can offer the following benefits to commuters and the community:

- Reduced vehicle miles traveled (VMT) and congestion.
- Reduced fuel consumption and travel costs.
- Less reliance on the automobile for travel.
- Travel time can decrease.
- Hands free time to prepare for work day.
- Fewer parking spaces and associated costs required.

Another consideration associated with enhanced transit programs is that there is a variety of funding options available for related projects. Although the cost per ton of VOCs reduced seems high, enhanced transit projects can be implemented and achieve multiple benefits for considerably less than the cost per ton of VOCs identified. Related projects are typically not designed and implemented on a scale necessary to reduce VOCs in high volume.

Implementation Issues

Start up: Enhanced transit service initiatives that include features like new rail service can take up to ten years to implement. Initiatives that require capital purchases like new or expanded bus service take about three years to start up. Other initiatives such as reduced fares can be implemented within six months.

Multi-modal trips: Although transit enhancements can reduce vehicle miles traveled, they do not reduce a high number of single occupant vehicle (SOV) trips. Also, since many of the converted SOV trips are mode transfers at park and ride transit stations, emission reduction benefits are minimized.

Comments

To learn more about transportation control measures, contact Scott Deloney at (800) 451-6027 press zero and ask for extension 3-5684 or dial (317) 233-5684 direct.

**A. Costs and Effectiveness of Transportation Control Measures, National Association of Regional Councils, Apogee Research, Inc., 1994.*